In the Specification

Please amend paragraphs [0039] and [0042] as follows:

[0039] $Vadd = G (Va+Vb+Vc+Vd+ Vga+Vgb+Vgc+Vgd)$ (3)

Therefore, if $4Gvosadd = -Vadd$, the total offset voltage of the addition signal can be compensated.

$$Vosadd = -Vadd / (4 \cdot G)$$

$$= - [(Va+Vb+Vc+Vd+ Vga+Vgb+Vgc+Vgd) / 4] \quad (4)$$

Accordingly, the correction offset voltage is not affected by the switch of the gain G because the gain G is not in the correction offset voltage of the addition signal Vosadd. Namely, from equation (4), the correction offset signal, i.e., the correction offset voltage of the addition signal Vosadd, is independent to gain G of the amplifiers. Then, as shown in FIG. 3, the correction offset signal Vosadd with a fixed value is previously added to the inputs of the amplifiers 66A, 66B, 66C and 66D.

[0042] Next, Fig. 5 is a portion of the circuit diagram in Fig. 2. With Fig. 5, the correction offset voltage Vossub in the subtraction signal (A+B)-(C+D) is described in detail as follows. The total offset voltage of the subtraction signal Vsub is represented by the foregoing equation (5). Therefore, if $4Gvossub = - Vsub$, the total offset voltage of the subtraction signal Vsub can be compensated.

$$Vossub = -Vsub / (4 \cdot G)$$

$$= - \{[(Va+Vb+Vga+Vgb)-(Vc+Vd+Vgc+Vgd)]/4\} \quad (6)$$

Accordingly, the correction offset voltage is not affected by the switch of the gain G because the gain G is not in the correction offset voltage of the subtraction signal Vossub. Namely, from equation (4), the correction offset signal, i.e., the correction offset voltage of the subtraction signal Vossub, is also independent to gain G of the amplifiers. Then, as shown in FIG. 5, the correction offset signal Vossub with a fixed value is previously added to the inputs of the amplifiers 66A, 66B, 66C and 66D